STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF UNDERGROUND STORAGE TANKS
WRS TENNESSEE TOWER
312 Rosa L. Parks Ave., 12th Floor
NASHVILLE, TENNESSEE 37243

Equipment Compatibility Checklist for Underground Storage Tank Systems with E-Blend Fuels (greater than 10% ethanol by volume)

Instructions

Pages 1 and 2 of this **Checklist** must be completed by the tank owner **and** someone familiar with equipment such as an experienced installer or Professional Engineer with knowledge, experience and training in materials science (API RP 1626) to determine compatibility of materials/ equipment/ components with E-Blend fuels. The installer or Professional Engineer must complete and sign the checklist. The following items must be compatible with E-Blend fuel (see asterisks for thread sealant and adhesive). Enter **Model/Brand, Manufacturer** and check either **Yes** or **No** in one or both columns under **UL Listed** or **Manufacturer Approved**. If a component was not used in the installation, write "not used" in the **Model/Brand, Manufacturer** column.

Page 3 of this **Checklist** must be signed by the owner and one copy submitted to the Division and one copy maintained with facility records and available for inspection.

Facility Name		Facility No.:
Address		No. of Tanks:
City	County	Zip Code:
Owner Name		Phone:
Company Name		Phone:
E-Blend stored ☐ E-85 ☐ Other _____ % ethanol		

Section 1: Tanks and Product Piping

Component	Model/Brand	Manufacturer	UL Listed	Manufacturer Approved
(a) Tank*			Yes ☐ No ☐	Yes ☐ No ☐
Tank construction material			Yes ☐ No ☐	Yes ☐ No ☐
Auto Shutoff			Yes ☐ No ☐	Yes ☐ No ☐
Sub Pump, O-rings, Gaskets			Yes ☐ No ☐	Yes ☐ No ☐
Tank top Sump			Yes ☐ No ☐	Yes ☐ No ☐
ATG Probe, float/sensor			Yes ☐ No ☐	Yes ☐ No ☐
Drop Tube			Yes ☐ No ☐	Yes ☐ No ☐
Ball Float			Yes ☐ No ☐	Yes ☐ No ☐
Sump Sensor			Yes ☐ No ☐	Yes ☐ No ☐
Spill bucket			Yes ☐ No ☐	Yes ☐ No ☐
(b) Pipe			Yes ☐ No ☐	Yes ☐ No ☐
Piping Material			Yes ☐ No ☐	Yes ☐ No ☐
Thread Sealant**			Yes ☐ No ☐	Yes ☐ No ☐
Adhesive**			Yes ☐ No ☐	Yes ☐ No ☐
Flex Connectors			Yes ☐ No ☐	Yes ☐ No ☐
Line Leak Detectors			Yes ☐ No ☐	Yes ☐ No ☐

*__Internally lined tanks are not suitable for conversion to storage of E-Blend fuels__.
** If compatibility is undetermined, analysis may be used to determine compatibility.

Dispensers and Dispenser Sumps

On June 24, 2010 Underwriters Laboratories (UL) granted safety listings to the **Gilbarco Veeder-Root Encore E85** dispenser and the **Dresser Wayne Ovation Eco** Fuel dispenser as certified for E-85 fuel. Effective June 24, 2010 for any tank converted or installed after June 24, 2010 to dispense E85, an E85 UL listed dispenser must be used for dispensing E-85 fuel. This UL listing only applies to units manufactured after June 24, 2010. If UL grants subsequent safety listings to other model dispensers certified for E85, use of those models will be acceptable as long as the models used were manufactured after the UL safety listing was granted. Components not approved for use by the manufacturer with E-blend fuels may not be used. Shear valves or emergency valves on existing and new UST systems must be compatible with E-Blend fuel.

If an owner discontinues storing E-Blend fuel and reverts back to gasoline before buying E-Blend compatible dispensers, daily visual dispenser inspections must continue for six months and the record of daily inspections maintained. Any leak must be reported to the Division within 72 hours.

Section 2: Dispensers and Dispenser Sump

Component	Model/Brand	Manufacturer		UL Listed
(c) Dispenser				Yes ☐
				Yes ☐
				Yes ☐
				Yes ☐
Hoses				Yes ☐
Fuel Filter				Yes ☐
(d) Dispenser/Sump				
Pipe			Yes ☐ No ☐	Yes ☐ No ☐
Pipe Sealant*			Yes ☐ No ☐	Yes ☐ No ☐
Flex Connector			Yes ☐ No ☐	Yes ☐ No ☐
Sump material			Yes ☐ No ☐	Yes ☐ No ☐
Emergency Valve			Yes ☐ No ☐	Yes ☐ No ☐
Sensor			Yes ☐ No ☐	Yes ☐ No ☐
Check valve			Yes ☐ No ☐	Yes ☐ No ☐

*If compatibility is undetermined, analysis may be used to determine compatibility.

Installer Certification

I have inspected the visible UST system components, and reviewed available installation records of the UST site referenced on pages 1 and 2 of this checklist. I have found the information listed on the above checklist regarding the equipment/components of this UST site to be true and accurate.

Signed _____ **Date** _____

☐ **Installer** ☐ **Professional Engineer**

Owner's Signature: _____ **Date:** _____

Before E-Blend is Transferred to the Tank

All items below must be completed before E-Blend fuel can be transferred to the tank.

☐ Check for water in the tank. ***No level of water is acceptable for E-Blend fuels*** due to the possibility of phase separation.

☐ All visible fittings and connections at the top of the tank are tight (no vapors escape and no water enters).

☐ Sump and spill containment covers must be tight to prevent water from entering.

☐ Any and all water infiltration problems must be eliminated. For example, spill buckets for these tanks should not have drain back mechanisms.

☐ If this tank was previously used, it was cleaned of all water and sediment and clean tank certificate obtained or comparable documentation (API Publication 2015 and NFPA 326) Mark **NA** if tank is new _____ **NA**

☐ Identify the fill port and paint access covers according to API RP 1637. Make sure transport driver cannot inadvertently deliver E-Blend fuel to the wrong fill pipe. Label dispenser.

First Delivery

☐ Tank filled to 80 percent capacity (recommended by the Renewable Fuels Association) and kept as full as possible for 7 to 10 days.

☐ Conduct a precision test of the tank system (0.1 gph leak rate) within seven days after tank is filled to make sure system is tight and leak detection equipment is operating properly. Report any "Fail" results.

☐ Test for water (use alcohol compatible paste if you stick your tanks) at the beginning of each shift for the first 48 hours after delivery. If there is water in the tank, remove it, find out how it got there and fix it so it doesn't occur again.

☐ Owner or operator knows how to visually inspect E-Blend dispenser for leaks and problems and how to complete inspection record.

Ongoing Maintenance Responsibilities

☐ Check for water daily with your stick or ATG system. No level of water in the tank is acceptable.

☐ If product seems to pump slowly, check and replace filters.

☐ Calibrate dispenser meter at the time of conversion and two weeks after conversion to verify meter accuracy. Particulate materials may cause excessive meter wear, which would require more frequent meter calibration (API RP 1626).

☐ Conduct daily, visual inspections of the dispenser and dispenser sump (secondary containment) beneath the dispenser (if one is installed) and all the other items on the inspection form. This form must be kept on site and available for submittal to the Division within 72 hours.

Owner's Signature: _____ **Date** _____

(by signing the owner acknowledges the preparatory items have been conducted, and awareness of ongoing responsibilities)